UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF COMMERCIAL FISHERIES

CALIFORNIA FISHERY MARKET NEWS MONTHLY SUMMARY

SEPTEMBER 1968

PART II–Fishing Information*

Sea-surface temperatures, fishing and research information of interest to the West Coast tuna-fishing industry and marine scientists

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U. S. Department of the Interior
Bureau of Commercial Fisheries
Fishery-Oceanography Center
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*Part 1 - "Fishery Products Production and Market Data" is issued by the Bureau of Commercial Fisheries, Market News Service, U.S. Custom House, Terminal Island, California

SEA SURFACE TEMPERATURE CHARTS, EASTERN PACIFIC OCEAN
SEPTEMBER 1968

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U.S. Bureau of Commercial Fisheries Biological Laboratories La Jolla, California and Honolulu, Hawaii

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Environmental Science Services Administration U.S. Weather Bureau, San Diego, California

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Pacific Missile Range, Range Operations Department, Geophysics Division Point Mugu, California

Pacific Oceanographic Group, Nanaimo, British Columbia, by H. J. Hollister from observations by G. C. Wilks at Langara Island Light; C. F. Olsen at Cape St. James Light; Lily Collins at Quatsino Lightstation; O. A. Edwards at Amphitrite Point Light

Scripps Institution of Oceanography, La Jolla, California, by Margaret Robinson and Hans Klein

Charts

Figure 1. --Mean sea surface temperatures (°F) derived from approximately 9000 observations. Squares show temperatures at weather ship stations. Numerals on shore are temperatures at coastal and lightship stations.

Figure 2. --Deviation of sea surface temperatures (°F) from long term charts of H. O. 225. Hatched areas are colder in 1968.

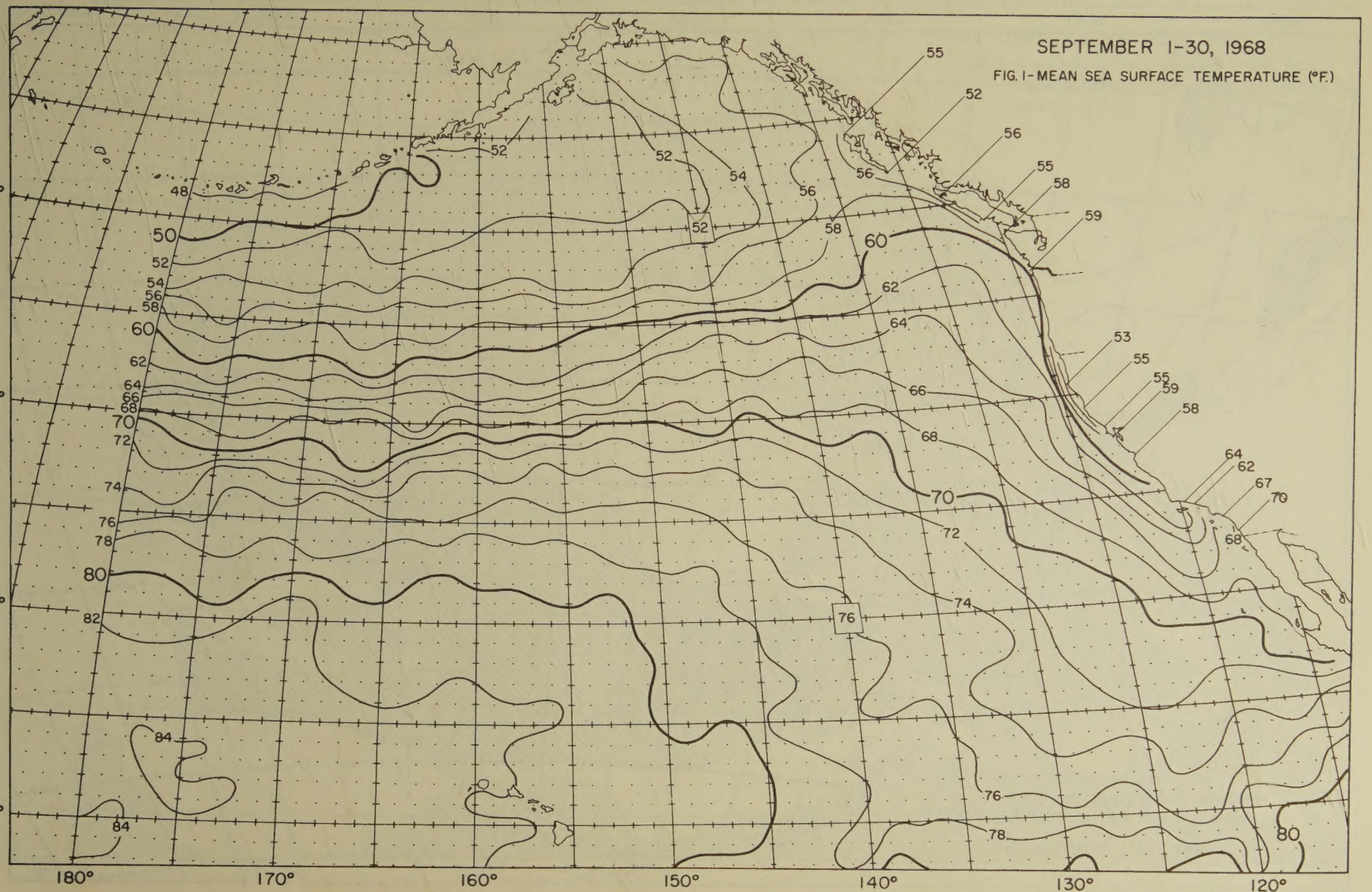
Figure 3. --Deviation of sea surface temperatures (°F) from those of September 1967. Hatched areas are colder in 1968.

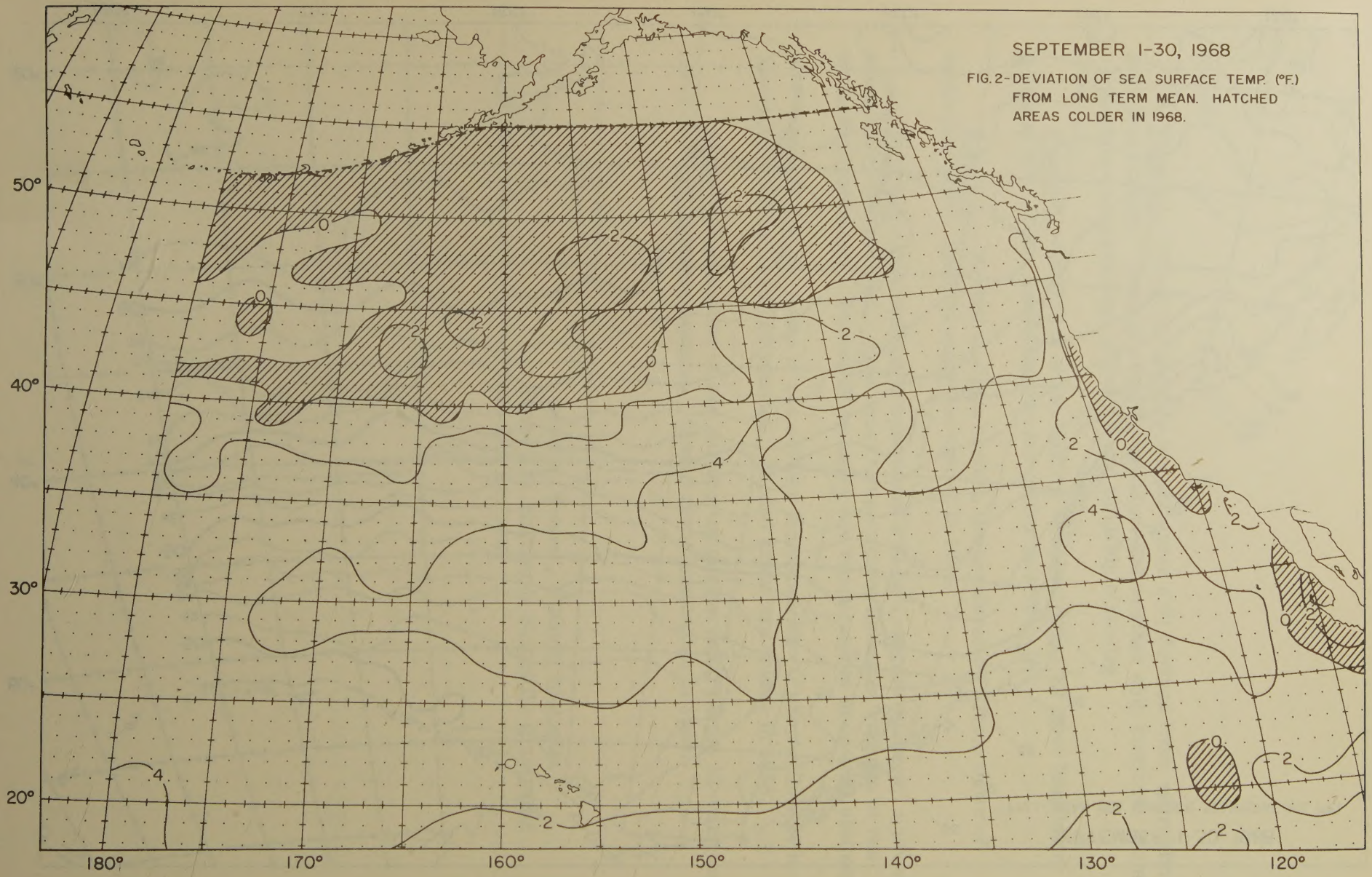
Figure 4. --Sea surface temperatures (°F) by 1-degree squares, approximately 3000 observations. Line under temperatures indicates average of two or more observations. Numerals on shore are temperatures at coastal stations.

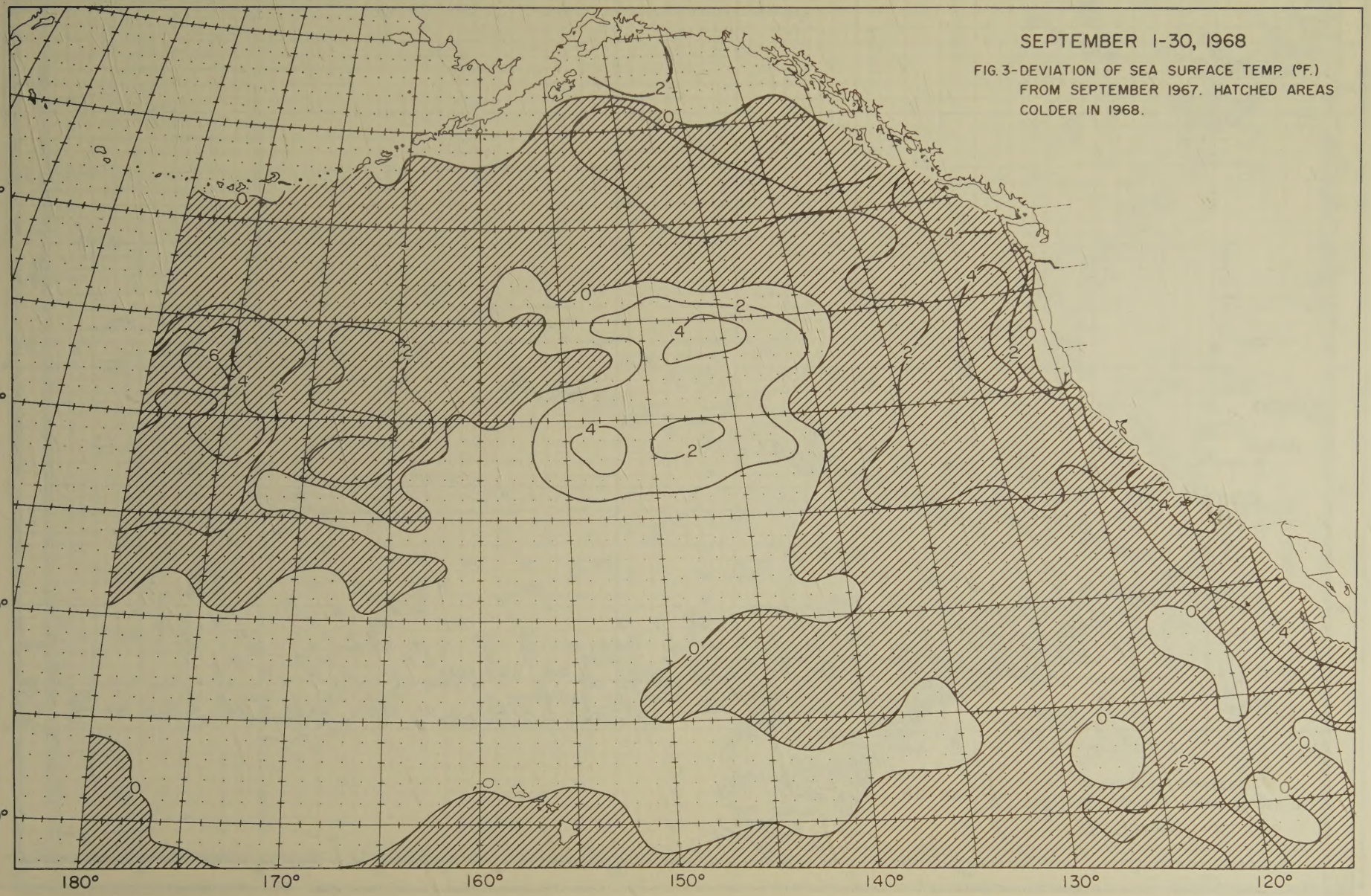
Figure 5. --Deviation of sea surface temperatures (°F) September 1968-September 1967 by 1-degree squares. Shaded areas are colder in 1968.

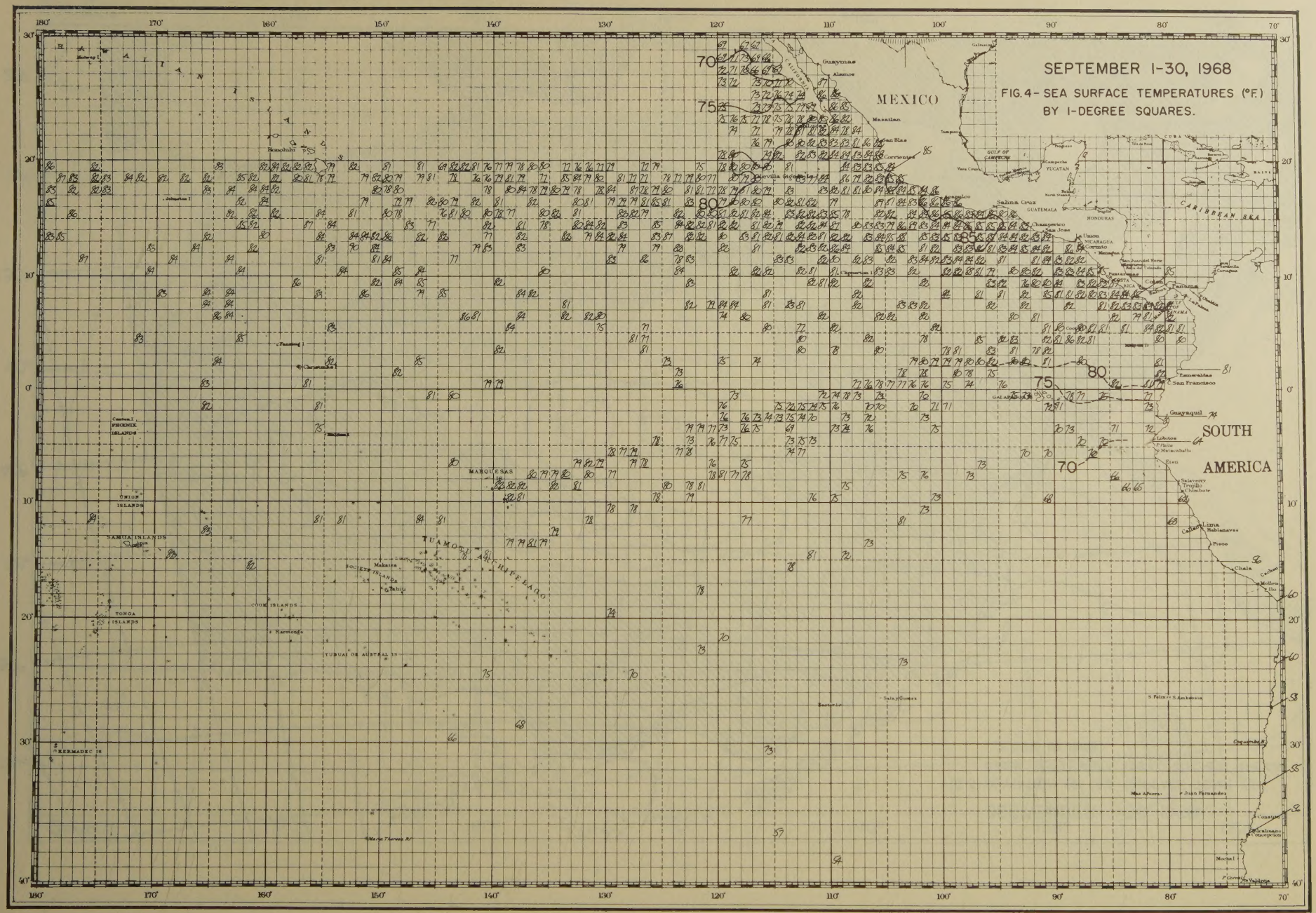
Figure 6. --Deviation of sea surface temperatures (°F) from 12-year mean (1947-1958) by 2-degree squares. Shaded areas are colder in 1968.

James A. Renner, Fishery Biologist
Kenneth S. Raymond, Scientific Illustrator
October 10, 1968


SEPTEMBER 1-30, 1968
FIG. 1- MEAN SEA SURFACE TEMPERATURE (°F.)
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


SEPTEMBER 1-30, 1968
FIG. 2 - DEVIATION OF SEA SURFACE TEMP. (°F.) FROM LONG TERM MEAN. HATCHED AREAS COLDER IN 1968.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


SEPTEMBER 1-30, 1968
FIG. 3-DEVIATION OF SEA SURFACE TEMP. (°F.) FROM SEPTEMBER 1967. HATCHED AREAS COLDER IN 1968.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


SEPTEMBER 1-30, 1968
FIG. 4 - SEA SURFACE TEMPERATURES (°F.)
BY 1-DEGREE SQUARES.
MEXICO
SOUTH
AMERICA
CARIBBEAN SEA
HAWAIIAN ISLANDS
PHOENIX ISLANDS
LINE ISLANDS
SAMOA ISLANDS
TUAMOTU ARCHIPELAGO
MARQUESAS
SOCIETY ISLANDS
COOK ISLANDS
TONGA ISLANDS
KERMADEC IS
TUBUAI OR AUSTRAL IS
Honolulu
Acapulco
Salina Cruz
Panama
Guayaquil
Lima
Callao
Chile
Valparaiso
Juan Fernandez
Easter I.
Pitcairn I.
Tahiti
Rarotonga
Samoa
Fanning I.
Christmas I.
Johnston I.
Palmyra I.
Canton I.
Howland I.
Baker I.
Galapagos Is.
Cocos I.
Malpelo I.
Clipperton I.
Revillagigedo Is.
Socorro
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Manzanillo
Champerico
San Jose
Corinto
Managua
Puntarenas
Buenaventura
Tumaco
Esmeraldas
San Francisco
Salaverry
Trujillo
Chimbote
Callao
Lima
Pisco
Chala
Mollendo
Ilo
Arica
Iquique
Antofagasta
Coquimbo
Valparaiso
Concepcion
Talcahuano
Mocha I.
Juan Fernandez
Mas A Fuera
Mas Afuera
S. Felix
S. Ambrosio
Sala y Gomez
Easter I.
Pitcairn I.
Marqs Thurses Rf
Kermadec Is
Tubuai or Austral Is
Rarotonga
Tahiti
Samoa
Fanning I.
Christmas I.
Johnston I.
Palmyra I.
Canton I.
Howland I.
Baker I.
Galapagos Is.
Cocos I.
Malpelo I.
Clipperton I.
Revillagigedo Is.
Socorro
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Manzanillo
Champerico
San Jose
Corinto
Managua
Puntarenas
Buenaventura
Tumaco
Esmeraldas
San Francisco
Salaverry
Trujillo
Chimbote
Callao
Lima
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Valparaiso
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Talcahuano
Mocha I.
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Mas Afuera
S. Felix
S. Ambrosio
Sala y Gomez
Easter I.
Pitcairn I.
Marqs Thurses Rf
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Tubuai or Austral Is
Rarotonga
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Fanning I.
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Johnston I.
Palmyra I.
Canton I.
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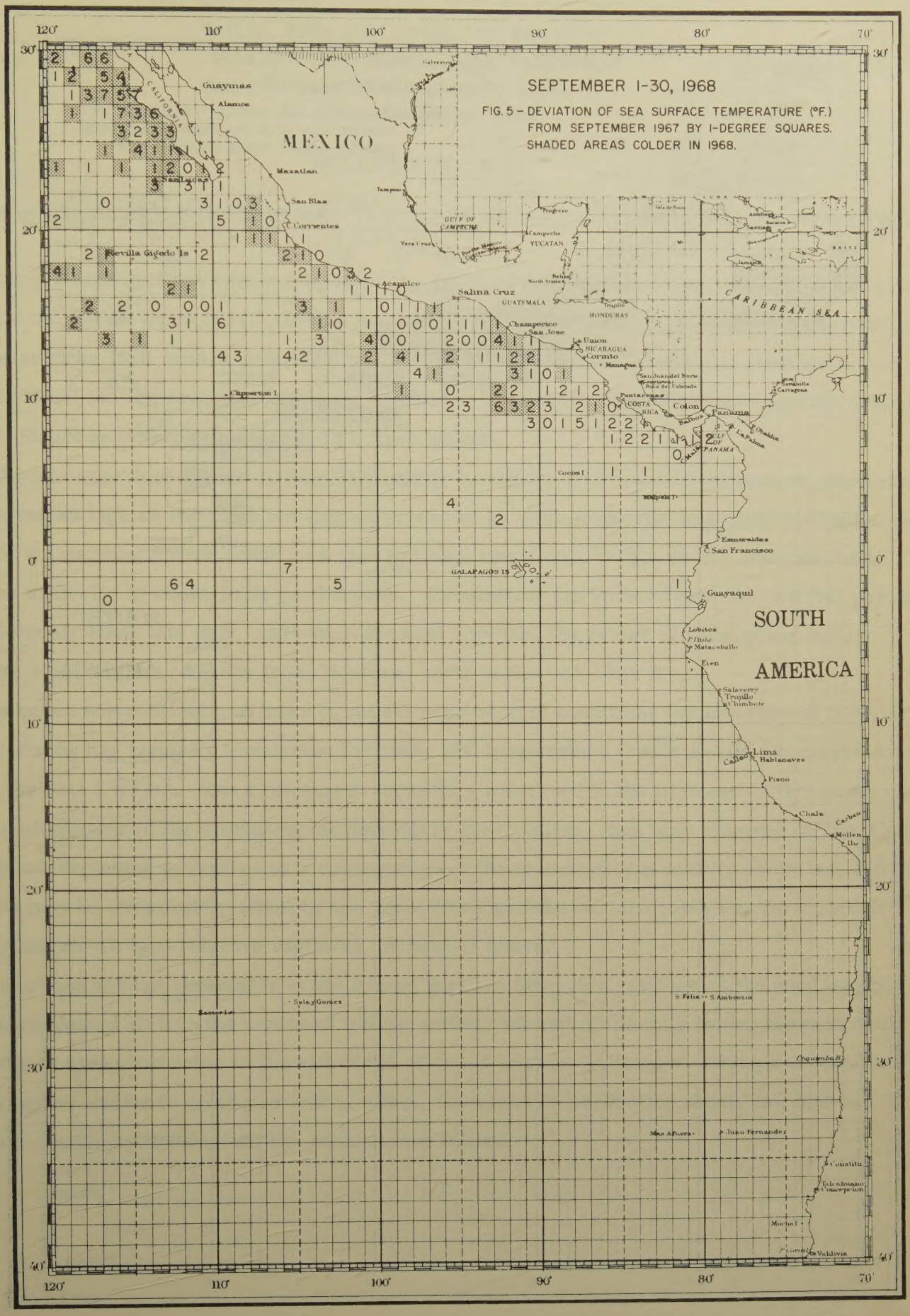
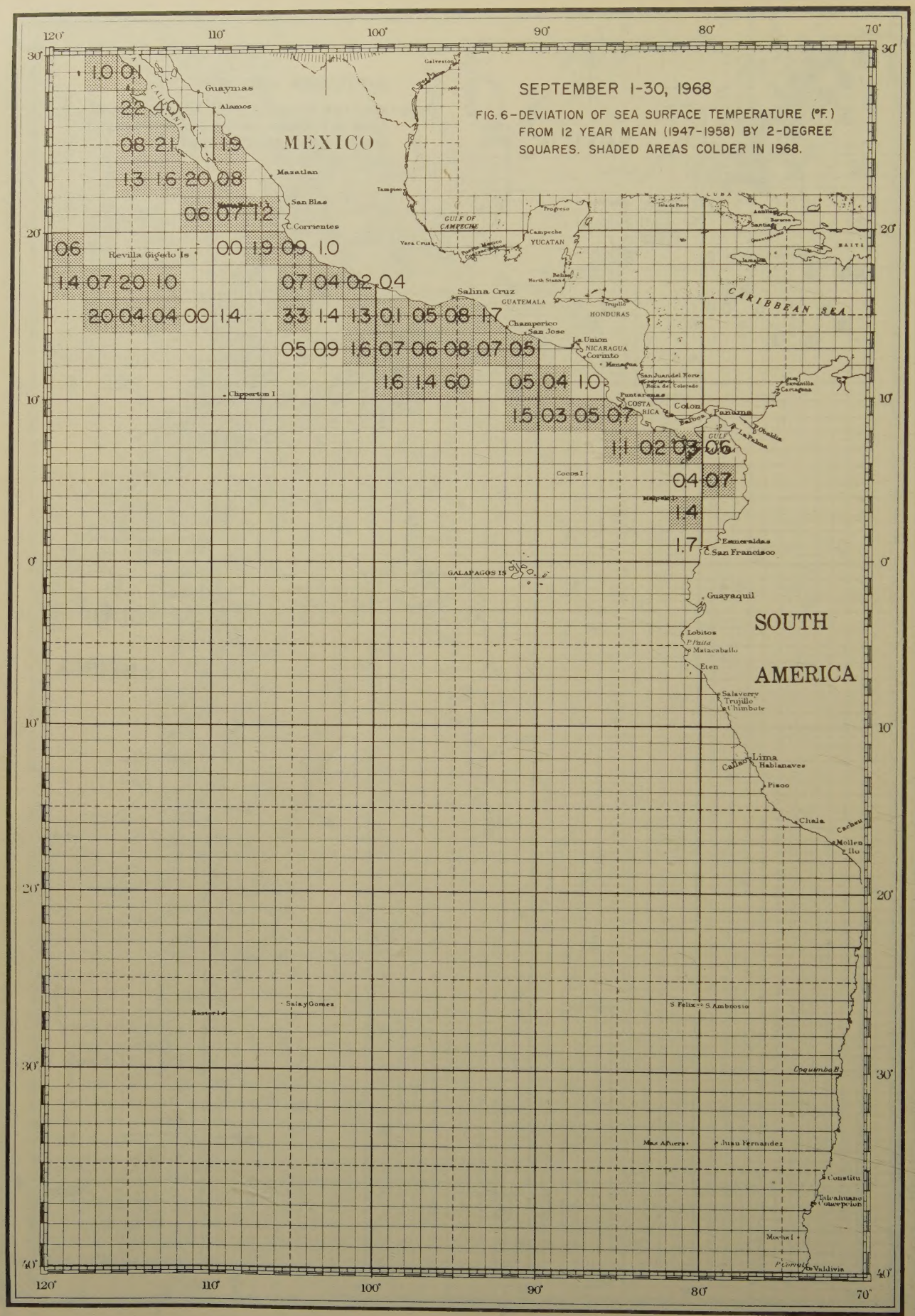
Baker I.
Galapagos Is.
Cocos I.
Malpelo I.
Clipperton I.
Revillagigedo Is.
Socorro


SEPTEMBER 1-30, 1968
FIG. 5 – DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM SEPTEMBER 1967 BY 1-DEGREE SQUARES. SHADED AREAS COLDER IN 1968.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CALIFORNIA
GULF OF CAMPECHE
GULF OF PANAMA
GALAPAGOS IS
YUCATAN
GUATEMALA
HONDURAS
COSTA RICA
NICARAGUA
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Acapulco
Salina Cruz
Champerico
San Jose
La Union
Corinto
Managua
Punta Arenas
Colon
Panama
Cocos I
Esmeraldas
San Francisco
Guayaquil
Lobitos
Talara
Matacaballo
Eten
Salaverry
Trujillo
Chimbote
Lima
Callao
Hablanaves
Pisco
Chala
Cachos
Mollendo
Salas y Gomez
S Felix
S Ambrosio
Juan Fernandez
Mas Afuera
Valdivia
Corral
Mocha I
Constitu
Talcahuano
Concepcion
Chiloe I
Chanaral
Coquimbo
Progreso
Campeche
Tampico
Vera Cruz
Galveston
Cuba
Haiti
Jamaica
Cartagena
Sabana
Chiriqui
Chepperton I
Revilla Gigedo Is
Easter I
120°
110°
100°
90°
80°
70°
30°
20°
10°
0°
40°


SEPTEMBER 1-30, 1968
FIG. 6-DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM 12 YEAR MEAN (1947-1958) BY 2-DEGREE SQUARES. SHADED AREAS COLDER IN 1968.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CAMPECHE
GALAPAGOS IS
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Revilla Gigedo Is
Salina Cruz
GUATEMALA
HONDURAS
Champerico
San Jose
NICARAGUA
Corinto
Managua
Punta Arenas
COSTA RICA
Colon
Panama
Chippertim I
Cocos I
Esmeraldas
San Francisco
Guayaquil
Lobitos
Matacaballo
Eten
Salaverry
Trujillo
Chimbote
Lima
Callao
Hablanaves
Pisco
Chala
Mollendo
Salay Gomez
S. Felix
S. Ambrosio
Coquimbo
Mas Afuera
Juan Fernandez
Constitu
Talcahuano
Concepcion
Mocha I
Valdivia
120°
110°
100°
90°
80°
70°
30°
20°
10°
0°
40°

UNITED STATES DEPARTMENT OF THE INTERIOR
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BULLETIN NO. 68-7

E SEASON ALBACORE LANDINGS MAINTAIN NEAR RECORD LEVELS IN PACIFIC NORTHWEST

Albacore tuna landings continue to swell the all-time record for Oregon, while in California, lings are the lowest since 1941. Oregon landings in September should fall between 7 and 8 million nds, causing the 1968 season total to be near 32-34 million pounds. California landings in tember reflect the improvement in fishing conditions from off Monterey to Crescent City, and may ll the 1968 production total to near 8-10 million pounds.

Baitboats experienced good fishing, especially during the first week of September, when single scores ran as high as 1500 fish per day; however, at no time so far this year have the baitboats ountered outstanding fishing conditions over prolonged periods like last year. Jigboats have erienced difficulty in maintaining good scores. Production has hovered near the 100 fish per day el continuously since late July, and within the past 2 weeks, the center of activity has been a row zone 40-100 miles offshore from Monterey north to the Columbia River.

The ocean environment continues to reflect near-normal conditions for this time of the year. sonal warming has virtually terminated for 1968, and temperature trends should commence down- d over the next 2 weeks. The reduction in upwelling witnessed in the first half of the month was sed by a slackening in the prevailing northwesterly wind regime. Sea temperatures off Washington Oregon are beginning to decline as a consequence of the intense storm activity in the last 4-5 days. s decline may be temporarily offset by the repositioning of the eastern north Pacific high cell r the California-Oregon offshore region in the past 48 hours.

The outlook for the remainder of the season appears favorable, as long as the good weather s. The southward shift in the center of fishing activity toward California during the past week cally occurs each year prior to the end of the albacore season. Although fishing has continued how a gradual decline in catch per unit of effort, the season's production should fall between 12 million pounds by the time all the receipts are tallied.

ember 16, 1968

Glenn A. Flittner
Leader, Fishery-Oceanography Program

UNITED STATES DEPARTMENT OF THE INTERIOR
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BUREAU OF COMMERCIAL FISHERIES
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BULLETIN NO. 68-8

ALBACORE PRODUCTION LEVELS HOLD AS SEASON NEARS END

Albacore production levels continue to increase the all-time landings record in Oregon as the 1968 fishing ason nears termination. At the present time, Oregon landings are estimated to total between 34 and 35 million unds. California ports have registered slight improvement over what has been a dismal season since the start, d the production to date amounts to only 5 million pounds. California's poorest year previously was in 1941, when ly 4 million pounds were produced.

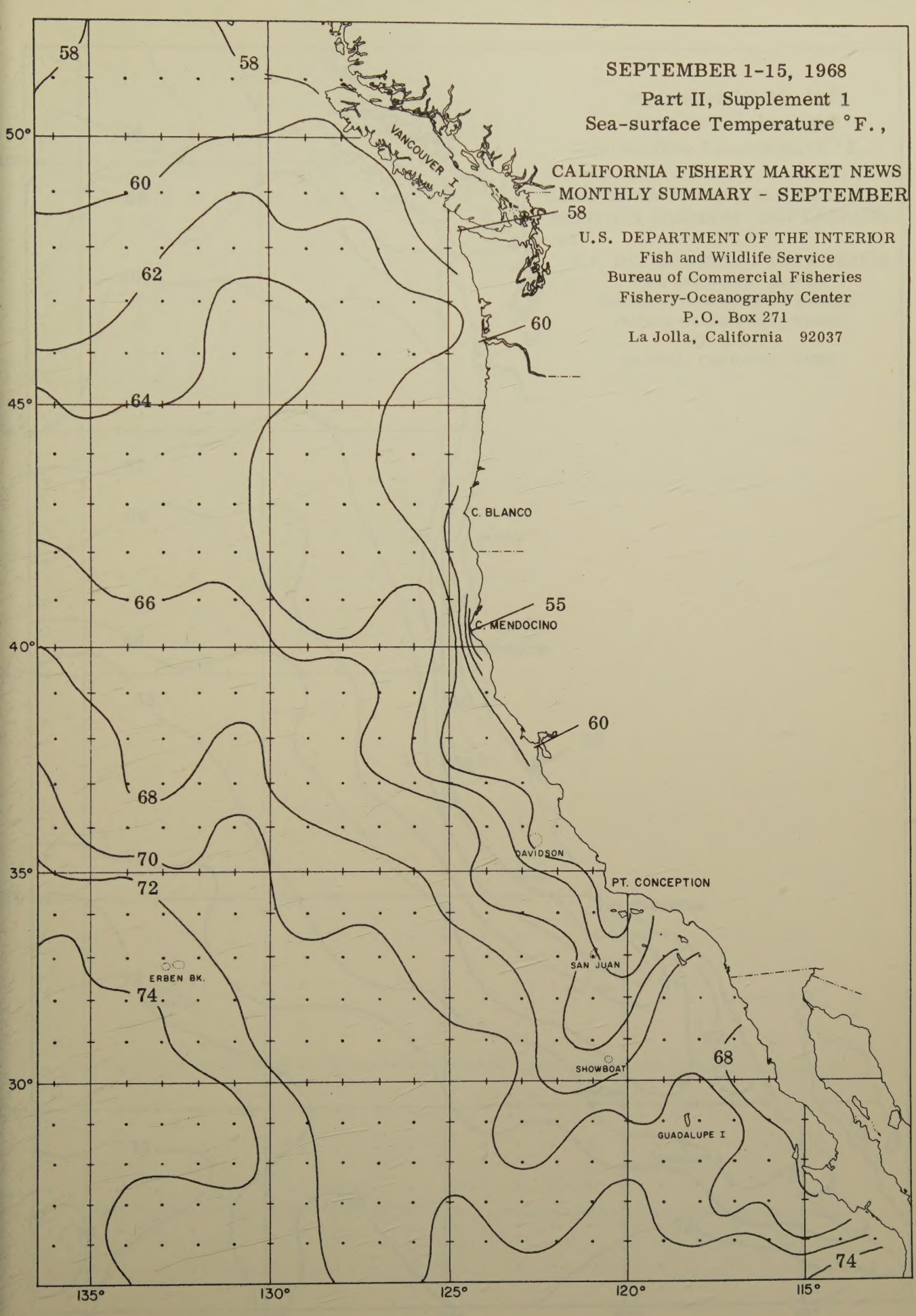
Fishing action has held up well, even though annual cooling associated with the first fall storms has begun. e centers of fishing activity remained in two areas: one between Columbia River and Gray's Harbor from 40 to miles offshore, and the other in the Point Arguello-Monterey region off Central California. Halibut schooners ve done consistently better than most jigboats trolling in rough weather in the northern region; baitboats logged ew good days with scores to 2500 fish per day off Oregon around September 23. Jigboat fishing off California s been spotty and subject to frequent changes in wind flow patterns; best fishing occurred when Santa Ana-type ather prevailed over Central and Southern California.

Weatherwise, much depends on how the fall storm systems affect Pacific Northwest coastal waters. The wnward sea surface temperature trend was checked briefly during the past week when relatively calm weather evailed over much of the west coast. Stormy, windy weather soon will remove heat from the already-thin warm per mixed layer in Oregon and Washington, precipitating the annual offshore migration. We have some evidence at albacore which were in the southernmost extension of their range this year off Southern California are com- encing to migrate northwestward and offshore in the 60-66° F optimum temperature zone; these fish have yielded few good catches over brief periods 35 to 50 miles off Point Arguello and Morro Bay in the past week.

The outlook for the next 2 weeks looks good unless bad weather commences to close in on the Pacific North- st. Oregon should expect to receive another 4 to 5 million pounds in October, thus bringing the state total to to 40 million pounds for the year. By the time boats returning to California ports unload fares caught in Pacific rthwest waters, adding to that being taken locally, landings should fall between 8 and 10 million pounds. Thus, al Pacific Coast production is expected to fall between 46 and 50 million pounds, placing 1968 well above average spite major geographic dislocations in the centers of availability. Our previous estimate of 40 to 42 million unds was predicated on earlier termination of the Pacific Northwest fishery and hence lower September landings ures.

ptember 30, 1968

Glenn A. Flittner
Leader, Fishery-Oceanography Program


SEPTEMBER 1-15, 1968
Part II, Supplement 1
Sea-surface Temperature °F.,
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY - SEPTEMBER
U.S. DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service
Bureau of Commercial Fisheries
Fishery-Oceanography Center
P.O. Box 271
La Jolla, California 92037
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72
74
74
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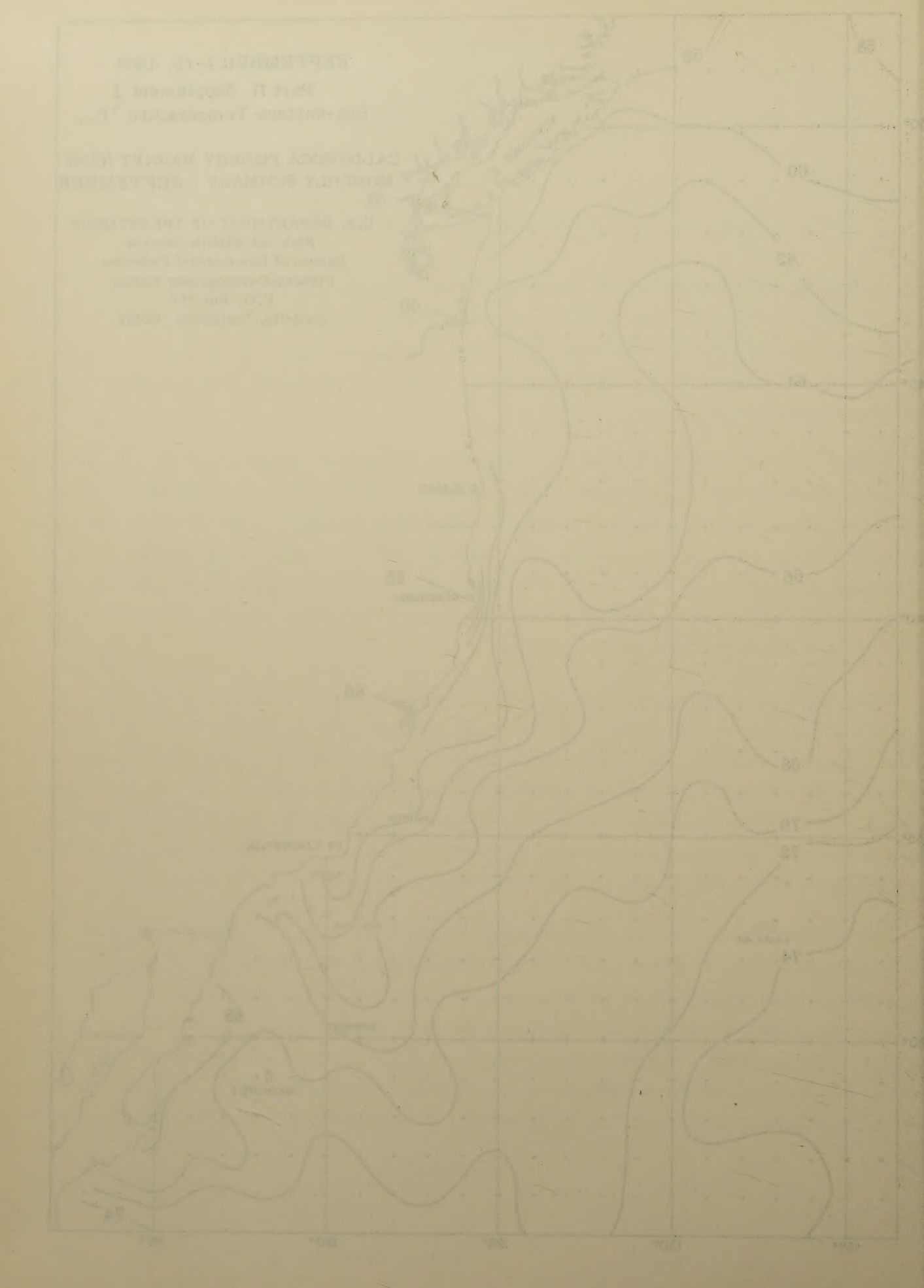
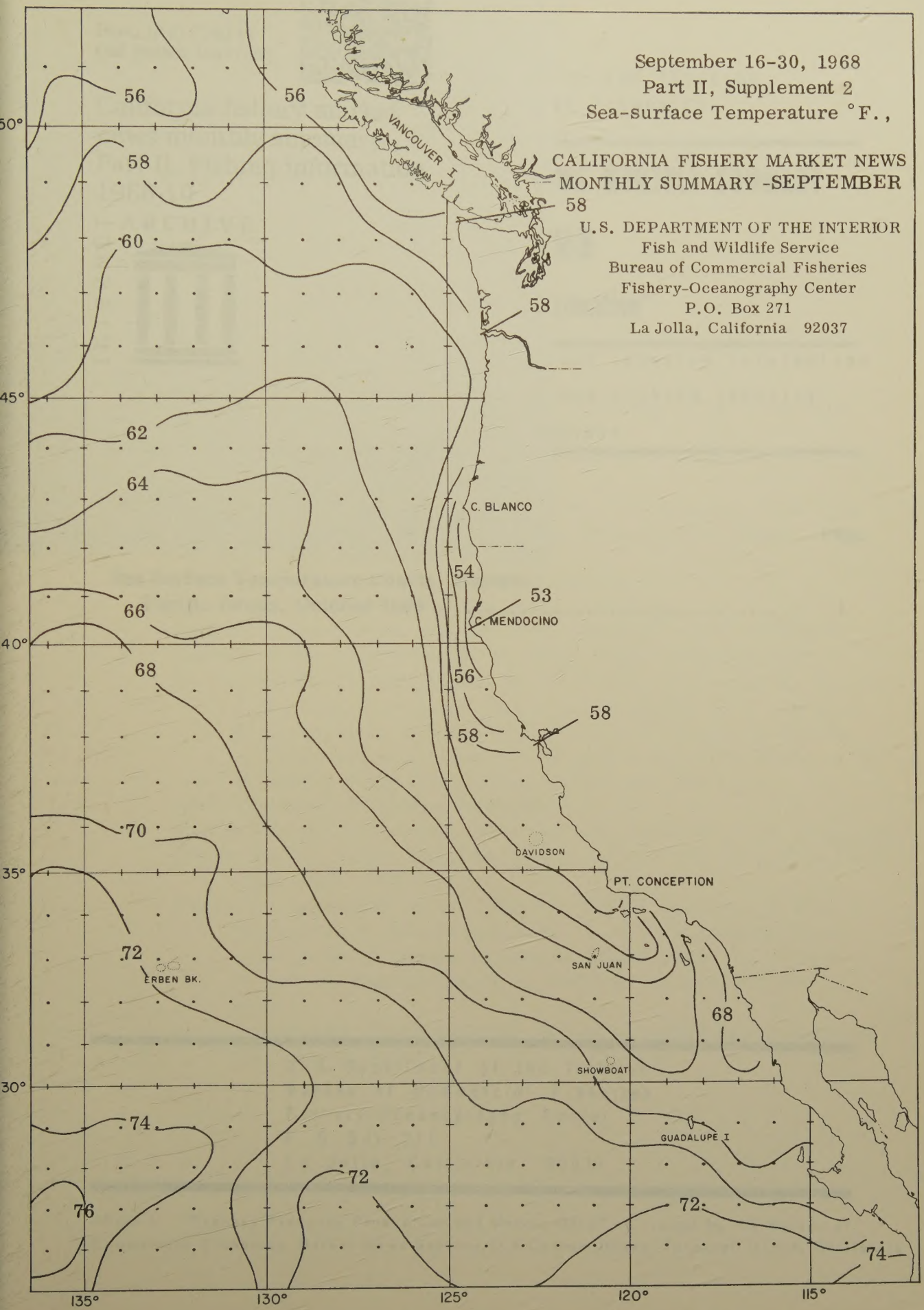
60
60
58
55
50°
45°
40°
35°
30°
135°
130°
125°
120°
115°
VANCOUVER I
C. BLANCO
C. MENDOCINO
DAVIDSON
PT. CONCEPTION
SAN JUAN
ERBEN BK.
SHOWBOAT
GUADALUPE I




September 16-30, 1968
Part II, Supplement 2
Sea-surface Temperature °F.,
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY -SEPTEMBER
U.S. DEPARTMENT OF THE INTERIOR
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P.O. Box 271
La Jolla, California 92037
VANCOUVER I
C. BLANCO
C. MENDOCINO
DAVIDSON
PT. CONCEPTION
SAN JUAN
SHOWBOAT
GUADALUPE I
ERBEN BK.
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